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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/533,230 | 04/28/2005 | Johan Leopold Victorina Hendrix | NL 021093 | 7068 |

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BRIARCLIFF MANOR, NY 10510

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| EXAMINER |
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LE, TUNG X

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| ART UNIT | PAPER NUMBER |
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2821

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| MAIL DATE | DELIVERY MODE |
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07/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,230

Applicant(s)

HENDRIX, JOHAN LEOPOLD
VICTORINA

Examiner

Tung X. Le

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 5-12, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is a response to the applicant's communication filed on April 28, 2005. In virtue of this filing, claims 1-20 are currently presented in the instant application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 13-15, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (U.S. 6,104,147).

With respect to claim 1, Nakamura discloses in figure 19 a pulse boost circuit; comprising an input (having a input [A-B] connected directly to the outputs of the ballast 4 and the power source [Vs]) comprising first and second input terminals (A,B) for receiving input voltage pulses (having input voltage pulses from pulse generator [3]) having a first magnitude (having a first input voltage of the generator [3]); an output (having a output [C-D] connected directly to the lamp [2]) comprising first and second output terminals (C,D); an electric energy storage buffer (C20-C21) having an input capable being charged by at least part of the input voltage pulses (figure 19); and pulse generator means (PT) having an input capable of being coupled to the energy storage buffer, the pulse generator means being designed to generate output voltage pulses (having output voltage pulses at the output terminals [C-D] for lighting the lamp [2]) having a second magnitude (having a second high output voltage pulses at the

secondary windings [PT21-PT22] required for starting the high pressure discharge lamp [2]), using energy from the energy storage buffer (C20-C21).

With respect to claim 2, Nakamura discloses in figure 19 that the second amplitude is larger than the first amplitude (the second amplitude of the output voltage at terminals [C,D] is much higher than the first amplitude of the input voltage at terminals [A,B] for starting the high pressure discharge lamp [2]; and column 13, lines [33-39]).

With respect to claim 3, Nakamura discloses that the pulse booster circuit further comprises a first pulse transfer path (1st Transfer Path) extending between the first input terminal (A) and the first output terminal (C); a second pulse transfer path (2nd Transfer Path) extending between the second input terminal (B) and the second output terminal (D); wherein the electric energy storage buffer (C20-C21) has an input capable of being coupled to at least one of the pulse transfer paths (figure 19); and wherein the pulse generator means (PT) has an output coupled to at least one of the pulse transfer paths (figure 19).

With respect to claim 4, Nakamura discloses that wherein the electric energy storage buffer comprises a storage capacitor (C20-C21) capable of being coupled between the two pulse transfer paths (figure 19).

With respect to claim 13, Nakamura discloses in figure 19 that the pulse generator means comprises a transformer (PT).

With respect to claim 14, Nakamura discloses in figure 19 that the pulse generator means has a first output (C) coupled to the first pulse transfer path (1st

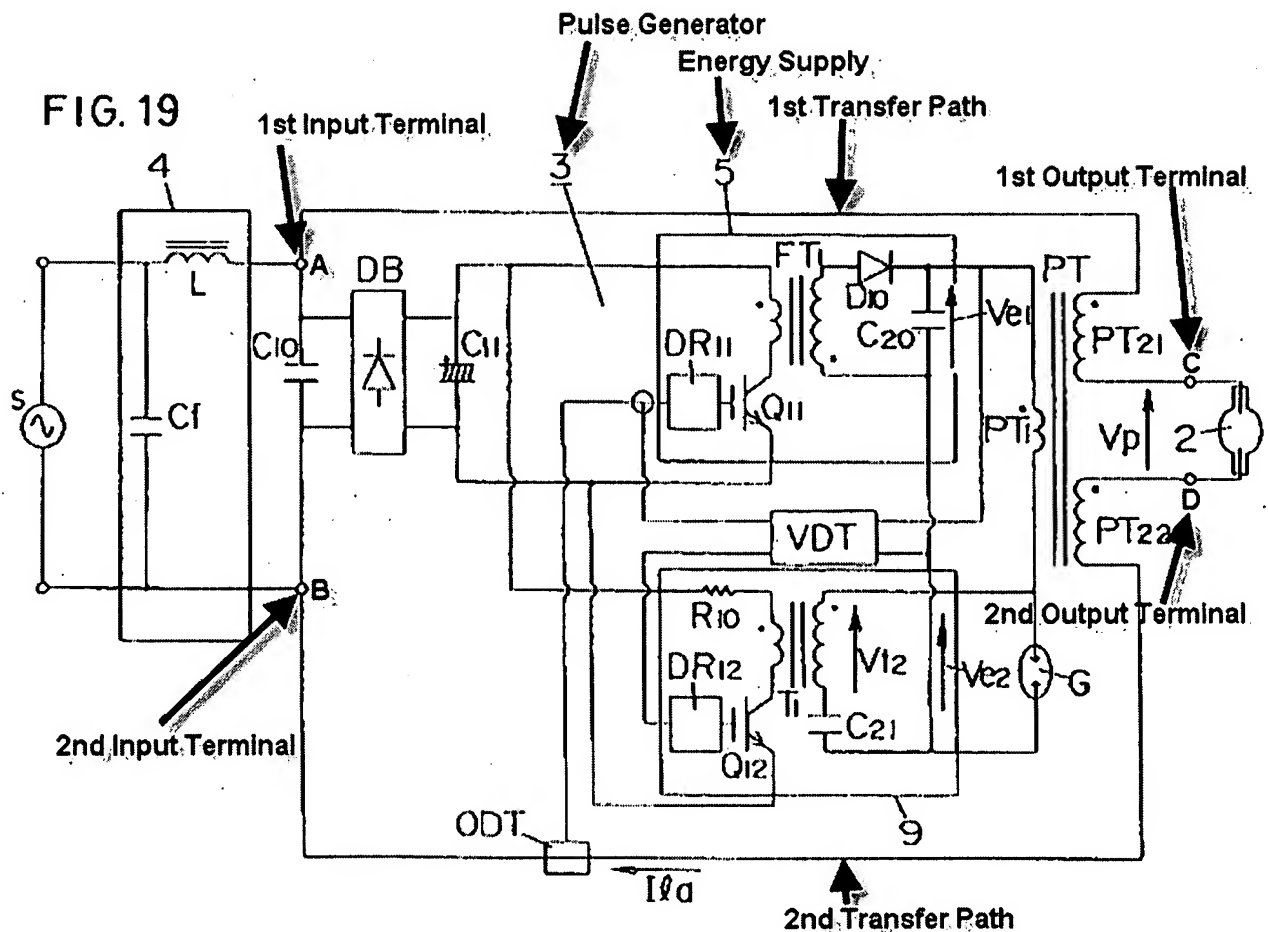
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Transfer Path) and a second output (D) coupled to the second pulse transfer path (2nd Transfer Path).

With respect to claim 15, Nakamura discloses in figure 15 that the pulse generator means comprises a transformer (PT) having an input winding (PT1) for coupling with the energy storage buffer (C20-C21) and having at least one output winding (PT21, PT22) incorporated in the first pulse transfer path (1st Transfer Path) or the second pulse transfer path (2nd Transfer Path).

With respect to claim 18, Nakamura discloses that wherein the pulse generator means (PT) has a first input (having a first input at the first winding [PT1] of the transformer [PT]) coupled to the input of the booster circuit (figure 19); wherein the pulse generator means has a second input (having a second input at the second windings [PT21 and PT22] of the transformer [PT]) capable of being coupled to an output of the energy storage buffer (C20-C21), and wherein the pulse generator means has an output (having an output [C,D]) coupled to the output of the booster circuit (figure 19).

With respect to claim 19, Nakamura discloses in figure 19 that driver system for a gas discharge lamp (2), comprising a lamp current (having a lamp current outputted from the first and second output terminals [C and D] for operating the lamp) and ignition pulses generating means (3).



Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (U.S. 6,104,147) in view of Holzer (U.S. 5,729,097).

With respect to claim 20, Nakamura discloses in figure 19 that a driver input (DR11 and DR12) for connecting to a lamp driver system (figure 19), except for specifying that the lamp driver system further comprising a lamp holder and lamp connector terminals connected the lamp holder to the power source.

Holzer discloses in figure 3 a lamp holder (21) and lamp connector terminals (having lamp connector terminals for connecting from a power source [28] to the ballast circuit [2] in side the lamp holder [21]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the lamp driving system of Nakamura by employing a lamp holder and lamp connector terminals in order for protecting the ballast circuit during operating since such a use of the lamp holder and lamp connector terminals for the stated purpose has been well known in the art as evidenced by the teaching of Holzer (figure 3).

Allowable Subject Matter

5. Claims 5-12 and 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Prior art of record fails to disclose or fairly suggest the following limitations:

- Pulse booster circuit further comprises buffer charging means adapted to sense a voltage difference between the two pulse transfer paths and to charge the

energy storage buffer from the pulse transfer path in response to sensing the voltage difference exceeding a first predetermined threshold as claimed in dependent claim 5 (claims 6-8 are objected for depending on claim 5).

- Pulse booster circuit further comprises buffer discharging means adapted to sense a voltage level of the energy storage buffer and to discharge the energy storage buffer at least partly into the input of the pulse generator means in response to sensing the voltage level exceeding a second predetermined threshold as claimed in dependent claim 9 (claims 10-12 are objected for depending on claim 9).
- Pulse booster circuit further comprises a series arrangement of a first breakdown switch and a storage capacitor, coupled between the two input terminals; and a transformer having an input winding connected in series with a second breakdown switch, the series arrangement of second breakdown switch and transformer input winding being connected in parallel to the storage capacitor, in combination with the remaining claimed limitations as claimed in dependent claim 16 (claim 17 is objected for depending on claim 16).

Citation of Relevant Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hirschmann et al. (U.S. 6,181,081 B1) discloses an ignition device for discharge lamp and method for igniting a discharge lamp.

Betz et al. (U.S. 5,894,202) discloses an ignition device for gas discharge lamps, particularly for motor vehicle lights.

Drews et al. (U.S. 5,892,332) discloses a starter for a high pressure gas discharge lamp.

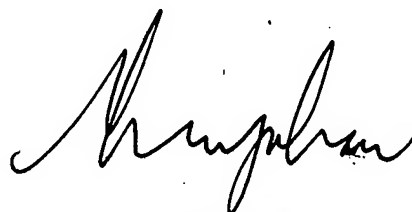
Inquiry

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung X. Le whose telephone number is 571-272-6010. The examiner can normally be reached on 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner
Tung Le
AU 2821
July 16, 2007



**THUY V. TRAN
PRIMARY EXAMINER**